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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,361	06/15/2001	Melvin A. Park	140 - 030	6701
7590 06/29/2004				
WARD & OLIVO 708 Third Ave New York, NY 10017			EXAMINER HASHMI, ZIA R	
			ART UNIT 2881	PAPER NUMBER

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/882,361	<b>Applicant(s)</b> PARK, MELVIN A.	
	<b>Examiner</b> Zia R. Hashmi	<b>Art Unit</b> 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/25/02 &amp; 3/5/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-47 are rejected under U.S.C. 103(a) as being unpatentable over Wang et al. ( US 2002/0121594 A1 ), in view of Whitehouse et al. ( 6,403,952 ).

3. With respect to independent claims 1, 21 & 41, and dependent claims 2-3, 15, 18, and 22, Wang et al. disclose a method and apparatus for a mass spectrometer, wherein their apparatus comprises:

at least one pair of conducting rods ( para 0066, lines 8-16, para 0067, lines 1-7, and 169 in Fig. 6 ); at least one capping electrode( para 0057, lines 5-12 ); means for applying voltages to said capping electrode ( para 0057, lines 9-12 ); wherein the conducting rods are aligned in parallel ( 185 in Fig. 6 ), wherein at least one capping electrode bounds said conducting rods, and wherein said at least one capping electrode comprises at least one opening or orifice ( para 0057, lines 5-16 and 158 in Fig. 6 ).

Their method for analyzing chemical species in a mass spectrometer comprises an ion production means, at least one multipole guide, a vacuum system, and a mass analyzer ( para 0055, lines 1-9 and Fig. 6 ).

4. With respect to dependent claims 10-11, 16-18, 28-29, and 42, Wang et al. disclose that their mass analysis region comprises a time-of-flight and a quadrupole

mass analyzer ( 163 & 169 in Fig. 6 ) and their ion production means could be from a plurality of sources like an atmospheric pressure chemical ionization (API), or an electrospray, or a MALDI ionization source ( para 0056, lines 1-5 ).

5. With respect to claims 1, 4-9, 12-14, 19-21, 23-27, 30-36, 37-41, and 43-47, Wang et al. fail to disclose method or apparatus for applying voltages to conducting rods, or vacuum stages, or means of transferring ions from ion guide into a mass analysis region. Whitehouse et al., however, disclose means for applying RF/ DC voltages to the conducting rods ( col. 2, lines 49-68 and col. 6, lines 29-34 ), means of applying voltages to the ion guide ( col. 9, lines 1-11 ) in which ions have been introduced ( col. 1, lines 14-26, col. 7, lines 39-46 and Fig. 1 ), and a plurality of vacuum stages, wherein the ion guide traps sample ions from the ion production region for ion selection, and transfers the sample ions to the analysis region ( col. 1, lines 50-54, col. 4, lines 15-17, col. 5, lines 21-27, and col. 7, lines 47-64 ).

It would have been obvious to one having ordinary skill at the time of the invention was made, to combine methods and apparatus of Wang and Whitehouse et al., because Wang et al. teach ( para 0003, lines 1-2 ) that mass spectrometry plays an important role in determining the molecular weight of sample chemical compounds.

### **Conclusion**


6. Whitehouse et al. disclose ( 6,403,953 ) a multipole ion guide, in which ions delivered by electrospray or other types of sources of sample ions, are focused and guided into a mass analyzer.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zia Hashmi whose telephone number is (571) 272-2473. The examiner can normally be reached between 8.30 AM- 5 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477.

Zia Hashmi

June 17, 2004

  
JOHN R. LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800